Bruhat Bangalore Mahanagara Palike

Name of Work :-Developments of roads and drains at Venkatala, Kenchenahalli, Nagenahalli, Harohalli village and Drilling of borewells and providing pipe line at SC/ST areas in ward no:01 and 02 of Yelahanka Division (Package no:08)

Modified Schedule - B

Sl No	Description of Work	Unit	Qty	Rate
1	KSRRB 300 - Excavation for road, drains and similar works - KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0 5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH Chapter 3 (Page No.143 & Item No-19.1)	Cum	1295.92	144.65
2	KSRRB M300-19. Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications. MORTH Specification No 301 (Page No.143 & Item No-19.1)	Cum	1993.70	36.72
3	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202 (Page No 140 & Item No-18.47)	Cum	1032.32	1000.30
4	KSRRB 300 - Excavation for road, drains and similar works - KSRRB 300-1. Earthwork excavation by manual means in hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0 5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH Chapter 3 (Page No.143 & Item No-19.2)	Cum	1121.65	199.17
5	KSRRB M300-14 Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (P.No.143/ Item No.19.14)	Cum	4697.50	45.62
6	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregate /sand/kaner/ Moorum KSRRB M100-1 Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications MORTH -100/ Chapter 1 (Page No.136 & Item No 17.1)	Cum	10400.58	100.14
7	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH / Chapter 3 (P.No.147/ Item No.19.64)	Sqm	10613.51	6.68
8	KSRB 4-1.3 : Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications.Specification No. KBS 4.1, 4.2 (Page No.13 & Item No.4.3)	Cum	1343.41	5676.90

9	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200 including cost of materials, labour, HOM complete as per specifications. -do- Wall & bottom thickness 15cm (Page No.271 & Item No-37.59.2)	Cum	365.38	7421.59
10	KSRB 4.9.2:Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications Specification No. KBS 4 6.3-do-TMT Bars Fe 500 (Page No.18 & Item No.4.46 2)	tonne	20.10	78962.59
11	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms.thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2(P No. 13 / Item No.4.6)	Cum	64.87	6032.96
12	Supply and fixing Precast reinforced concrete slab 10cm thick including cost of reinforcement as per design and drawing, material cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveynce charges, labour charges inclusive of cost of all materials.	Sqm	3436.97	2453.15
13	Supply and fixing Precast reinforced concrete slab 250cm thick including cost of reinforcement as per design and drawing, material cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveynce charges, labour charges inclusive of cost of all materials.	Sqm	112.74	5687.27
14	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/ basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision.(P.No.153 It.No.20.5)	Cum	1907.29	2094.07

15	using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. -do- with OPC at 360 kg/cum	Cum	1175.44	5469.94
16	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc , complete. (Page No.27 & Item No. 5.30)	No	2408.00	453.97
17	KSRB 15-19.2 :Providing and applying ready mix priming coat over concrete/ masonry/asbestos cement sheet/ plastered surfaces including preparing the surface after throughly cleaning of oil,grease,dirt and other foreign matter and sand papering including cost of materials, labour, complete as per specifications. (Page No.124 & Item No.15.80)	Sqm	433.52	41.17
18	KSRB 800-1.Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. (Page No.180 & Item No.24.1)	Sqm	433.52	89.01
19	KSRRB 300-50. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by mechanical means attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM complete as per specifications.MORTH / Chapter 3 (Page No.146 & I.No.19.56)	Sqm	3008.34	43.39
20	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No.182 & Item No.24.15)	Sqm	180.76	477.34

21	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 Page No. 155/ Item No. 20.18/ PWD SR 2018-19	Cum	1338.84	2100.74
22	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 Complete with all lead and lift and as per the direction of the Engineer-in-Charge. Page No. 158/ Item No. 21.6/ PWD SR 2018-19 Current Rate w.e.f 01/07/2020	Sqm	3008.34	31.16
23	KSRRB M500- 15. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H M.P with Mechanical paver Gr-II (50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications MORTH Specification No.507 (P.No.160 It No.21.17.6) Current Rate w.e.f 01/07/2020	Cum	150.42	6726.16
24	KSRRB 500-7 Providing and applying tack coat with bitumen emulsion using 80/100 grade bitumen (VG20) on the prepared black toped suface at 2.5kg per 10 sqm, heating bitumen in boiler fitted with spray set (Excluding cleaning of road surface) including cost of all materials, labour, HOM of Machineries complete as per Specifications . (P.No.158 & I.No.21.7) Current Rate w.e.f 01/07/2020	Sqm	3008.34	13.35
25	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015 - do - using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) (P.No.162 Item No.21.78.12) Current Rate w.e.f 01/07/2020	Cum	120.33	7912.28

26	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc.(RDWS&SC Bangalore Circle SR 2019-20 P.No.126, Item No.13.04)	Each BW	4.00	4073.93
27	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 300 PSIG & above 1100 CMF & above in all strats including over burden. Fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of rig and supporting vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,complete) (PRED Bangalore Circle SR 2019-20 P.No.124, Item No.13.01) 0.00 to 50.00mtrs (RDWS&SC Bangalore Circle SR 2019-20 P.No.124, Item No.13.01 (a)	Rmtr	200.00	375.17
28	50.00 to 100.00mtrs (RDWS&SC Bangalore Circle SR 2019-20 P.No.124, Item No.13.01 (b)	Rmtr	200.00	477.89
29	100.00 to 150.00mtrs (RDWS&SC Bangalore Circle SR 2019-20 P.No.124, Item No.13.01 (c)	Rmtr	200.00	493.02
30	150.00 to 200.00mtrs (RDWS&SC Bangalore Circle SR 2019-20 P.No.124, Item No.13.01 (d)	Rmtr	200.00	579.52
31	200.00 to 250.00mtrs (RDWS&SC Bangalore Circle SR 2019-20 P.No.124, Item No.13.01 (e)	Rmtr	200.00	685.48
32	250.00 to 300.00mtrs (RDWS&SC Bangalore Circle SR 2019-20 P.No.124, Item No.13.01 (f)	Rmtr	200.00	756.83
33	300.00 to 350.00mtrs (RDWS&SC Bangalore Circle SR 2019-20 P.No.124, Item No.13.01 (g)	Rmtr	200.00	891.98
34	KSRB13-1.1 : Providing and fixing to wall, ceiling and floor galvanised / mild steel tube nominal bore with fittings (medium grade weight 1.27kg/mtr) B class including cost of all materials, labour charges, HOM and testing complete as per specifications. Specification No.KBS 13.2.14 / 13.8 (PWP, & IWTD SR 2018-19 Bangalore, P.No.92, I No.13.6) - do - 50 mm dia	Rmtr	1380.00	569.69
35	Supply of ISI Mark nominal bore, plain end steel casing pipe-grade of steel Fe 410 of wall thickness conforming to IS 4270-2001 and latest amendments, electrical resistance welded steel tube material and conforming to IS 1387-1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5 to 7m. Both ends threaded conforming to IS 554-1985, one end fixed with socket conforming to IS 42702001 and the other end with screwed pipes. All pipes shall be resonably free from defects. The tubes shall be resonably straight and should be with ISI marking weighing 25.10kg/m. (exclusive of all taxes and duties). Prices include Collar-Medium duty (Page No.246 Item No.13.85 of RURAL DRINKING WATER & SANITATION CIRCLE BANGALORE FOR THE YEAR 2019-20)	Rmtr	240.00	1432.58

36	Providing and fixing MS casing collars as per IS 1239 (part-II) 1982 with all latest amendments if any for any dia. The thickness of plate used for covering one end shall be 3mm (minimum). The dimensions of caps and colars shall be strictly as per IS 1239 (PartII) 1982 with all amendments (Page No.246 Item No.13.86 of RURAL DRINKING WATER & SANITATION CIRCLE BANGALORE FOR THE YEAR 2019-20)	Each	44.00	162.18
37	Providing and laying at site of work MS casing caps as per IS 1239 (part-II) 1982 with all latest amendments if any for any dia. The thickness of plate used for covering one end shall be 3mm (minimum). The dimensions of caps and colars shall be strictly as per IS 1239 (Part-II) 1982 with all amendments including cost of material and labour charges for fixing, if any etc. complete with all lead and lifts and as directed by the Engineer in charge (Page No.247 Item No.13.87 of RURAL DRINKING WATER & SANITATION CIRCLE BANGALORE FOR THE YEAR 2019-20)	Each	4.00	108.12
38	Submersible Cable 1x3x10.0 Sq.mm (Page No.XLVII / Sl.No.9) (PWP, & IWTD SR 2018-19 Bangalore)	Mtr	2760.00	244.79
39	Borewell Cap & Clamp Set (Page No.XLVII / Sl.No.17) (PWP, & IWTD SR 2018-19 Bangalore)	Each	4.00	2002.83
40	Providing and fixing unplasticised PVC pipes with working pressure 10 kg/sq.cm with pipe fittings, clips, making good the floor, including cost of all materials, labour charges, HOM and testing complete as per specifications -do- with 200mm outer dia (Page No.77 Item No.11.56.5 of PWP, & IWTD SR 2018-19 Bangalore)	Rmtr	80.00	1758.04
41	15HP/11kW 15 Stage (submersible Three Phase 6 inch/150mm for 2018-19 (page no.XLI / Sl.No.38)	No	4.00	59203.58
42	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws 20"x20"x2.5" (P.No.24 It.No.5.6.6)	Each	4.00	306.51
43	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm (P.No.40 It.No.6.4.4)	Mtr	60.00	157.46
44	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required 6 sqmm to 16 sqmm (P.No.41 It.No.6.5)	Mtr	60.00	12.47
45	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) Asphalt cutting (P.No.41 It.No.6.6.4)	Mtr	60.00	118.62
46	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV.(P.No.41 It.No.6.9)40mm	Mtr	16.00	351.65
47	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc. (P.No.42 It.No.6.10.2)16Sqmm	No	4.00	283.42

48	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia (P.No.40 It.No.6.1)	No	4.00	3148.79
49	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.32 Amps (P.No.25 It.No.5.7.2)	No	8.00	182.65
50	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. (P.No.27 It.No.5.17.7)	No	4.00	1800.24
51	Fabricating supplying and mounting MS box made out 16SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete (P.No.31 It.No.5.42.2)	Sq.Cm	86400.00	0.37
52	Supply and Installation / Fixing / Provision of Outdoor type Thermoplastic Modular Panel enclosure with transparent Polycarbonate Lid, shock proof, IP65 (Weather Proof), rust proof, dust proof, water proof, corrosion proof having internally Embedded gasket on both lid and flap suitable to fix Single Phase / Three Phase Energy Meter in suitable base plate and having a provision for Fuse / MCB cutout with suitable transparent hinged flap opening for operating MCB along with complete tamper proof SEALING facility 600mmx600mmx170mm (P.No.31 It.No.5.44.4)	No.	4.00	12681.43
53	KSRB 13-7.1-4: Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 Page No. 95 Item No. 13.55 / PWD SR 2018-19	No	4.00	1479.87
54	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete 50 mm dia. (P. No.97 / I. No. 13.81.3 PWD SR 2018-19	No	4.00	233.66
55	KSRB 2-2.1 : Earth work excavation by manual means for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification No, KBS 2.1 (a) / 2.3.5, Page No.5 & Item No.2.3)	Cum	1211.24	332.69

56	KSRB13-9 : Providing and fixing to wall, ceiling and floor high density polyethylene pipes 6.00 kgf/sq.cm working pressure of outside diameter raising mains & exposed distribution pipes with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM and testing complete as per specifications. Specification No. KBS 13.2.15.2 / 13.9 KSRB13-9.4 - do - 63 mm dia (Page No.96, Item No.13.73.2)	Rmtr	2883.90	413.92
57	Refilling available earth around pipelines, cables in layers not exceeding 20cms in depth compacting each deposited layers by ramming after watering lead upto 50m and lift upto 1.5m including cost of labour complete as per specification (P.No.6 I.No.2.11)	Cum	778.65	134.63
58	KSRB 13.6.3-6 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 65mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3 P.No.94 / It.No.13.38 PWD SR 2018-19	Each	10.00	2339.97
59	Bescom Charges	Each	4.00	15745.50

Executive Engineer
Bruhat Bengaluru Mahanagara Palike
Yelahanka Division